

CLAIMS

1. A module (40) for acquiring geophysical signals, comprising:

5       • at least one casing (B''(i), B''), which houses processing means including means for digitizing the signals, each casing being associated with a track (T(i)),

10      • and two cable sections (C''(i)) each comprising:  
- at a first end, a connector (30) suitable for being coupled up to a complementary connector,  
- at a second end, an adapter (140a, 140b) designed to be fixed to a casing (B'', B''(i)) and to effect an electrical link with the processing means housed in the casing, the main body of each casing being materialized by two adapters (140a, 140b) and a cover (170), the adapters and the cover being fixed together in a nonremovable manner so that the casing does not comprise any connector for coupling to other casings.

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2. The module (40) as claimed in claim 1, characterized in that it comprises at least two casings (B''(i), B''), linked in series by cable segments (C'(i+1)) each of which comprises at its two ends an adapter (140a, 140b) designed to be fixed to a casing and to effect an electrical link with the processing means housed in the casing.

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3. The module (40) as claimed in claim 1 or 2, characterized in that each casing (B'') comprises a rigid member (150) fixed on one face of the respective adapters (140a, 140b) secured to the respective cable sections or segments, so as to take up a sizeable part of the tensile loads

exerted between these two cable sections or segments.

4. The module as claimed in claim 3, characterized in that each casing (B'') comprises means (143, 143a, 143b) for attaching the adapters of the cables to the rigid member (150).

5. The module as claimed in claim 4, characterized in that the means for attachment are rigid lugs (143, 143a, 143b), a part of which is embedded in the adapter, another part of each lug projecting from the adapter toward the rigid member (150) and engaged in a respective orifice (153) of the rigid member along a direction substantially perpendicular to the direction of the part of the cable sections or segments which is adjacent to the casing (B'').

10 6. The module as claimed in one of the preceding claims, characterized in that processing means integrated into the cable adapters comprise spark arresters.

15 7. The module as claimed in one of claims 3 to 6, characterized in that the rigid member carries means for processing electrical signals.

20 8. The module as claimed in one of the preceding claims, characterized in that each casing comprises leaktightness means (1100, 1101a, 1101b).

25 9. The module as claimed in one of claims 5 or 6 taken in combination with claim 8, characterized in that the leaktightness means comprise a seal

(1100) placed in a space circumscribed by the lugs (143).

5 10. The module as claimed in one of claims 3 to 9, characterized in that at least one casing comprises a platen (180) situated on a second face of the cables which is opposite the first face and is substantially parallel to the rigid member (150).

10 11. The module as claimed in claims 5 and 10 taken in combination, characterized in that parts of the lugs (143) which project toward the platen (180) are engaged in orifices of said platen.

15 12. The module as claimed in one of the preceding claims, characterized in that the cable section end connectors (30) are mechanically and electrically hermaphrodite and are identical.

20 13. The module as claimed in one of claims 1 to 12, characterized in that the casings comprise a port (P) for the connection of at least one geophysical sensor outside the casing.

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